

30. (Twice Amended) A lead-acid cell for a battery comprising a container, at least one positive plate and at least one positive negative plate disposed within the container, a separator disposed within the container and separating the at least one positive plate and the at least one negative plate, the positive plate comprising a grid supporting structure having a layer of active material coupled thereto, the grid supporting structure comprising:

a lead-based alloy comprising lead;
tin in the range of about 0.8% to about 1.1%;
calcium in an amount such that the ratio of tin to calcium is greater than about 12:1;
silver in the range of greater than 0 to about 0.02%;
wherein the percentages are based upon the total weight of the lead-based alloy.

44. (Twice Amended) A grid supporting structure for use in a lead-acid battery having at least one positive plate and at least one negative plate disposed within a container, a separator disposed within the container and separating the at least one positive plate and the at least one negative plate, the grid supporting structure having a layer of active material pasted thereto, the grid supporting structure comprising:

a lead-based alloy consisting essentially of lead;
tin in the range of about 0.8% to about 1.1%;
calcium in an amount such that the ratio of tin to calcium is greater than about 12:1;
silver in the range of greater than 0 to about 0.02%;
wherein the percentages are based upon the total weight of the lead-based alloy.

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1 55. (Once Amended) The grid supporting structure as defined in claim 44,
2 contained in a maintenance free battery.

1 57. (Once Amended) A plate for use in a battery comprising a lead-based
2 alloy consisting essentially of:
3 tin in an amount of about 0.8% to about 1.1%;
4 calcium in an amount such that the ratio of tin to calcium is greater than
5 about 12:1;
6 silver in an amount of greater than 0 to about 0.015%;
7 wherein the percentages are based on the total weight of the lead based
8 alloy.

1 62. (Once Amended) The plate of Claim 57 wherein the silver is in an amount
2 of about 0 to 0.03%.

1 63. (Once Amended) The plate of Claim 58 wherein the calcium is in an
2 amount of about 0.03 to 0.055.

1 70. (Once Amended) The plate of Claim 59 further comprising a container
2 for an automotive battery wherein the active material is a paste.

1 71. (Once Amended) The plate lead-acid cell of Claim 30 wherein the silver
2 is in an amount of about 0.005 to 0.015%.